Microbac

Laboratory Report Number: L14040523

Scott Shane
Ohio Environmental Protection Agency
4675 Homer Ohio Lane
Groveport, OH 43125

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Stephanie Mossburg – Team Chemist/Data Specialist
(740) 373-4071
Stephanie.Mossburg@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on April 29 2014

David E. Vandenberg

David Vandenberg – Managing Director

State of Origin: OH
Accrediting Authority: N/A ID:N/A
QAPP: Microbac OVD

Microbac

Lab Report #: L14040523
Lab Project #: 2755.022
Project Name: GROVEPORT OFFICE
Lab Contact: Stephanie Mossburg

Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

There were no discrepancies.

Discrepancy	Resolution

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
0019216	I	0.0			X
0019220	I	0.0			X
0019221	I	0.0			X
0011390	I	0.0			X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	NA
2	Were custody seals intact?	NA
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	NA
11	Were pH ranges acceptable? (voa's excluded)	NA
12	Were VOA samples free of headspace (less than 6mm)?	NA

Microbac

Lab Report #: L14040523
Lab Project #: 2755.022
Project Name: GROVEPORT OFFICE
Lab Contact: Stephanie Mossburg

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
RS 404	L14040523-01	04/04/2014 12:35	04/07/2014 12:15
RS 406	L14040523-02	04/04/2014 12:46	04/07/2014 12:15
RS 410	L14040523-03	04/04/2014 13:00	04/07/2014 12:15
RS 413	L14040523-04	04/04/2014 13:15	04/07/2014 12:15
RS 175	L14040523-05	04/04/2014 14:10	04/07/2014 12:15

Login Number: L14040523
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

The TCLP extracts of samples 01, 02, 03, 04, and 05 were insoluble in water and were extracted and analyzed via the mid-level procedure for 8260B.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following analytes: 4-bromofluorobenzene, toluene-d8. Please see the applicable QC report for a detailed presentation of the failures. Sample duplicate analysis of sample 01 confirmed the outliers. Dilution analyses of samples 02 and 03 confirmed the outliers. Target analytes not detected above the RLs in the analysis of sample 04.

Other: Samples 01, 02, 03, 04, 05, were run at a dilution. Reporting limits elevated for samples01, 02, 03, 04, and 05 due to the presence of non-target analytes.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 81893
Approved By: Michael Albertson

Login Number: L14040523
Department: Conventionals
Analyst: Roy Halstead

METHOD

Analysis SW-846 1010 (Flashpoint)

Analysis Method 1010 is applicable only to liquid samples as specified in 40 CFR Part 261.21(a) (1). Section 261.21 does not define ignitability criteria, or test methods, for solid matrices. Any flashpoint data reported in this report for samples other than liquids should be considered of screening value only.

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 81382
Approved By: Deanna Hesson

Certificate of Analysis

Sample #: L14040523-01 **PrePrep Method:** N/A **Instrument:** PRECISION
Client ID: RS 404 **Prep Method:** 1010 **Prep Date:** N/A
Matrix: Oil **Analytical Method:** 1010 **Cal Date:**
Workgroup #: WG471126 **Analyst:** RAH **Run Date:** 04/14/2014 09:00
Collect Date: 04/04/2014 12:35 **Dilution:** 1 **File ID:** PR14041414520101
Sample Tag: **Units:** Degrees C

Analyte	CAS #	Result	Qual	RL	MDL
Ignitability		26.0		0.000	0.000

Sample #: L14040523-02 **PrePrep Method:** N/A **Instrument:** PRECISION
Client ID: RS 406 **Prep Method:** 1010 **Prep Date:** N/A
Matrix: Oil **Analytical Method:** 1010 **Cal Date:**
Workgroup #: WG471126 **Analyst:** RAH **Run Date:** 04/14/2014 09:00
Collect Date: 04/04/2014 12:46 **Dilution:** 1 **File ID:** PR14041414520601
Sample Tag: **Units:** Degrees C

Analyte	CAS #	Result	Qual	RL	MDL
Ignitability		45.0		0.000	0.000

Sample #: L14040523-03 **PrePrep Method:** N/A **Instrument:** PRECISION
Client ID: RS 410 **Prep Method:** 1010 **Prep Date:** N/A
Matrix: Oil **Analytical Method:** 1010 **Cal Date:**
Workgroup #: WG471126 **Analyst:** RAH **Run Date:** 04/14/2014 09:00
Collect Date: 04/04/2014 13:00 **Dilution:** 1 **File ID:** PR14041414521001
Sample Tag: **Units:** Degrees C

Analyte	CAS #	Result	Qual	RL	MDL
Ignitability		35.0		0.000	0.000

Sample #: L14040523-04 **PrePrep Method:** N/A **Instrument:** PRECISION
Client ID: RS 413 **Prep Method:** 1010 **Prep Date:** N/A
Matrix: Oil **Analytical Method:** 1010 **Cal Date:**
Workgroup #: WG471126 **Analyst:** RAH **Run Date:** 04/14/2014 09:00
Collect Date: 04/04/2014 13:15 **Dilution:** 1 **File ID:** PR14041414521701
Sample Tag: **Units:** Degrees C

Analyte	CAS #	Result	Qual	RL	MDL
Ignitability		68.0	>	0.000	0.000

>	Result is greater than the associated numerical value.

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Lab Report #: L14040523
Lab Project #: 2755.022
Project Name: GROVEPORT OFFICE
Lab Contact: Stephanie Mossburg

Certificate of Analysis

Sample #:	L14040523-05	**PrePrep Method:**	N/A	**Instrument:**	PRECISION
Client ID:	RS 175	**Prep Method:**	1010	**Prep Date:**	N/A
Matrix:	LiqWaste	**Analytical Method:**	1010	**Cal Date:**	
Workgroup #:	WG471126	**Analyst:**	RAH	**Run Date:**	04/14/2014 09:00
Collect Date:	04/04/2014 14:10	**Dilution:**	1	**File ID:**	PR14041414522401
Sample Tag:		**Units:**	Degrees C		

Analyte	CAS #	Result	Qual	RL	MDL
Ignitability		78.0	>	0.000	0.000

>	Result is greater than the associated numerical value.

Certificate of Analysis

Sample #: L14040523-01 | **PrePrep Method:** | **Instrument:** HPMS17
Client ID: RS 404 | **Prep Method:** 5030B/5030C/5035A | **Prep Date:** N/A
Matrix: TCLP Leach | **Analytical Method:** 8260B | **Cal Date:** 03/25/2014 18:50
Workgroup #: WG471459 | **Analyst:** TMB | **Run Date:** 04/15/2014 22:49
Collect Date: 04/04/2014 12:35 | **Dilution:** 500 | **File ID:** 17M004028
Sample Tag: DL01 | **Units:** ug/L

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene		U	24800	619	D018	500
Carbon tetrachloride		U	24800	1240	D019	500
Chlorobenzene		U	24800	619	D021	100000
Chloroform		U	24800	619	D022	6000
1,2-Dichloroethane		U	24800	1240	D028	500
1,1-Dichloroethene		U	24800	2480	D029	700
Methyl Ethyl Ketone	22800	J	49500	12400	D035	200000
Tetrachloroethene		U	24800	1240	D039	700
Trichloroethene		U	24800	1240	D040	500
Vinyl chloride		U	49500	1240	D043	200

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	92.9	86	118	
1,2-Dichloroethane-d4	99.9	80	120	
Toluene-d8	114	88	110	*
4-Bromofluorobenzene	278	86	115	*

J	The analyte was positively identified, but the quantitation was below the RL
U	Not detected at or above adjusted sample detection limit

Sample #: L14040523-02 | **PrePrep Method:** | **Instrument:** HPMS17
Client ID: RS 406 | **Prep Method:** 5030B/5030C/5035A | **Prep Date:** N/A
Matrix: TCLP Leach | **Analytical Method:** 8260B | **Cal Date:** 03/25/2014 18:50
Workgroup #: WG471459 | **Analyst:** TMB | **Run Date:** 04/15/2014 23:48
Collect Date: 04/04/2014 12:46 | **Dilution:** 1000 | **File ID:** 17M004031
Sample Tag: DL01 | **Units:** ug/L

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene		U	66700	1670	D018	500
Carbon tetrachloride		U	66700	3330	D019	500
Chlorobenzene		U	66700	1670	D021	100000
Chloroform		U	66700	1670	D022	6000
1,2-Dichloroethane		U	66700	3330	D028	500
1,1-Dichloroethene		U	66700	6670	D029	700

Certificate of Analysis

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Methyl Ethyl Ketone		U	133000	33300	D035	200000
Tetrachloroethene	13800	J	66700	3330	D039	700
Trichloroethene	9830	J	66700	3330	D040	500
Vinyl chloride		U	133000	3330	D043	200

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	98.9	86	118	
1,2-Dichloroethane-d4	104	80	120	
Toluene-d8	118	88	110	*
4-Bromofluorobenzene	904	86	115	*

J	The analyte was positively identified, but the quantitation was below the RL
U	Not detected at or above adjusted sample detection limit

Sample #: L14040523-03
Client ID: RS 410
Matrix: TCLP Leach
Workgroup #: WG471459
Collect Date: 04/04/2014 13:00
Sample Tag: DL01

PrePrep Method:
Prep Method: 5030B/5030C/5035A
Analytical Method: 8260B
Analyst: TMB
Dilution: 500
Units: ug/L

Instrument: HPMS17
Prep Date: N/A
Cal Date: 03/25/2014 18:50
Run Date: 04/15/2014 23:29
File ID: 17M004030

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene	949	J	24500	613	D018	500
Carbon tetrachloride		U	24500	1230	D019	500
Chlorobenzene		U	24500	613	D021	100000
Chloroform		U	24500	613	D022	6000
1,2-Dichloroethane		U	24500	1230	D028	500
1,1-Dichloroethene		U	24500	2450	D029	700
Methyl Ethyl Ketone		U	49000	12300	D035	200000
Tetrachloroethene	54800		24500	1230	D039	700
Trichloroethene	3750	J	24500	1230	D040	500
Vinyl chloride		U	49000	1230	D043	200

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	96.0	86	118	
1,2-Dichloroethane-d4	102	80	120	
Toluene-d8	122	88	110	*
4-Bromofluorobenzene	667	86	115	*

J	The analyte was positively identified, but the quantitation was below the RL
U	Not detected at or above adjusted sample detection limit

Certificate of Analysis

Sample #:	L14040523-04	**PrePrep Method:**		**Instrument:**	HPMS17
Client ID:	RS 413	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	TCLP Leach	**Analytical Method:**	8260B	**Cal Date:**	03/25/2014 18:50
Workgroup #:	WG471459	**Analyst:**	TMB	**Run Date:**	04/15/2014 22:30
Collect Date:	04/04/2014 13:15	**Dilution:**	50	**File ID:**	17M004027
Sample Tag:	DL01	**Units:**	ug/L		

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene		U	2400	60.1	D018	500
Carbon tetrachloride		U	2400	120	D019	500
Chlorobenzene		U	2400	60.1	D021	100000
Chloroform		U	2400	60.1	D022	6000
1,2-Dichloroethane		U	2400	120	D028	500
1,1-Dichloroethene		U	2400	240	D029	700
Methyl Ethyl Ketone		U	4810	1200	D035	200000
Tetrachloroethene		U	2400	120	D039	700
Trichloroethene		U	2400	120	D040	500
Vinyl chloride		U	4810	120	D043	200

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	91.1	86	118	
1,2-Dichloroethane-d4	98.6	80	120	
Toluene-d8	109	88	110	
4-Bromofluorobenzene	240	86	115	*

*	Surrogate or spike compound out of range
U	Not detected at or above adjusted sample detection limit

Sample #:	L14040523-05	**PrePrep Method:**		**Instrument:**	HPMS17
Client ID:	RS 175	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	TCLP Leach	**Analytical Method:**	8260B	**Cal Date:**	03/25/2014 18:50
Workgroup #:	WG471540	**Analyst:**	ADC	**Run Date:**	04/16/2014 13:45
Collect Date:	04/04/2014 14:10	**Dilution:**	50	**File ID:**	17M004069
Sample Tag:	DL02	**Units:**	ug/L		

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Benzene			250	6.25	D018	500
Carbon tetrachloride			250	12.5	D019	500
Chlorobenzene			250	6.25	D021	100000
Chloroform			250	6.25	D022	6000
1,2-Dichloroethane			250	12.5	D028	500
1,1-Dichloroethene			250	25.0	D029	700

Certificate of Analysis

Analyte	Result	Qual	RL	MDL	EPA HW#	Reg. Limit
Methyl Ethyl Ketone			500	125	D035	200000
Tetrachloroethene			250	12.5	D039	700
Trichloroethene			250	12.5	D040	500
Vinyl chloride			500	12.5	D043	200

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	95.2	86	118	
1,2-Dichloroethane-d4	94.1	80	120	
Toluene-d8	105	88	110	
4-Bromofluorobenzene	99.3	86	115	

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
April 29, 2014

001 - BIO-CHEM TESTING WVDEP 220	002 - REIC Consultants, Inc. WVDEP 060
003 - Sturm Environmental	004 - MICROBAC PITTSBURGH
005 - ES LABORATORIES	006 - ALCOSAN LABORATORIES
007 - ALS LABORATORIES	008 - BENCHMARK LABORATORIES
010 - MICROBAC CHICAGOLAND	ADC - ANTHONY D. CANTER
ADG - APRIL D. GREENE	AWE - ANDREW W. ESSIG
AZH - AFTER HOURS	BAF - BRICE A. FENTON
BJO - BRIAN J. OGDEN	BKT - BRENDAN TORRENCE
BLG - BRENDA L. GREENWALT	BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN	CAF - CHERYL A. FLOWERS
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD
CLS - CARA L. STRICKLER	CLW - CHARISSA L. WINTERS
CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL
DAK - DEAN A. K	DCM - DAVID C. MERCKLE
DEV - DAVID E. VANDENBERG	DIH - DEANNA I. HESSON
DLB - DAVID L. BUMGARNER	DLP - DOROTHY L. PAYNE
DSM - DAVID S. MOSSOR	ECL - ERIC C. LAWSON
ENY - EMILY N. YOAK	EPT - ETHAN P. TIDD
ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON
JDS - JARED D. SMITH	JLL - JOHN L. LENT
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES
JYH - JI Y. HU	KAJ - KELLIE A. JOHNSON
KDW - KATHRYN D. WELCH	KEB - KATIE E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON
KRB - KAELY R. BECKER	KRP - KATHY R. PARSONS
LKN - LINDA K. NEDEFF	LLS - LARRY L. STEPHENS
LSB - LESLIE S. BUCINA	MBK - MORGAN B. KNOWLTON
MDA - MIKE D. ALBERTSON	MDC - MIKE D. COCHRAN
MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS	PIT - MICROBAC WARRENDALE
PSW - PEGGY S. WEBB	QX - QIN XU
RAH - ROY A. HALSTEAD	REK - BOB E. KYER
RLB - BOB BUCHANAN	RM - RAYMOND MALEKE
RNP - RICK N. PETTY	RS - ROSEMARY SCOTT
SAV - SARAH A. VANDENBERG	SDC - SHALYN D. CONLEY
SEP - SUZANNE J. PAUGH	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	TLC - TYLER L. CORDELL
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
TPA - TYLER P. AMRINE	VC - VICKI COLLIER
WJB - WILL J. BEASLEY	WRR - WESLEY R. RICHARDS
WTD - WADE T. DELONG	XXX - UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
April 29, 2014

Qualkey: STD_ND=U

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,H1	The analyte was positively identified, but the quantitation was below the RL. Sample analysis performed past holding time
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Not detected at or above adjusted sample detection limit
U,H1	Not detected; sample analysis performed past holding time.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

COC No. A 18277

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: Ohio EPA

Project Contact: Scott Shane | Contact Phone #: 614 836 8764

Turn Around Requirements: normal | Location:

Project ID: MNE140404-105I

Sampler (print): Ron Bonner / Scott Shane | Signature: Ronald W. Bonner

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other

ADDITIONAL REQUIREMENTS

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	pH-corrosivity	TCLP metals	TCLP VOCs	ignitability	TOTAL # (LAB USE)
RS404			04-04-14	~~11:02~~ 12:35	liquid					✓	✓	
RS406			04-04-14	12:46	↓					✓	✓	
RS410			04-04-14	13:00						✓	✓	
RS 413			04-04-14	13:15						✓	✓	
RS 175			04-04-14	14:10	liquid					✓	✓	

Microbac OVD
Received: 04/07/2014 12:15
By: DEAN K
221000052256

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Ronald W. Bonner	4/4/14	1635	R. Schumacher	R. Schumacher	04/07/14	1010	Dean K
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:	
Dean K	040714	1210					

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

Internal Chain of Custody Report

Login: L14040523
Account: 2755
Project: 2755.022
Samples: 5
Due Date: 18-APR-2014

Samplenum	Container ID	Products
L14040523-01	347033	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	
Comments:Products cancelled.							
4	STORE	EXT	A2	14-APR-2014 16:19	CLS	JDH	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L14040523-01	347034	826-TC TC-ZHE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		07-APR-2014 14:31	ERP		

Samplenum	Container ID	Products
L14040523-02	347035	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	
Comments:Products cancelled.							
4	STORE	EXT	A2	14-APR-2014 16:20	CLS	JDH	
Comments:Products cancelled.							

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L14040523
Account: 2755
Project: 2755.022
Samples: 5
Due Date: 18-APR-2014

Samplenum	Container ID	Products
L14040523-02	347036	826-TC TC-ZHE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	
4	STORE	EXT	A2	14-APR-2014 16:20	CLS	JDH	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		07-APR-2014 14:31	ERP		

Samplenum	Container ID	Products
L14040523-03	347037	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	

Comments:Products cancelled.

4	STORE	EXT	A2	14-APR-2014 16:19	CLS	JDH	

Comments:Products cancelled.

Samplenum	Container ID	Products
L14040523-03	347038	826-TC TC-ZHE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	
4	STORE	EXT	A2	14-APR-2014 16:19	CLS	JDH	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		07-APR-2014 14:31	ERP		

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Internal Chain of Custody Report

Login: L14040523
Account: 2755
Project: 2755.022
Samples: 5
Due Date: 18-APR-2014

Samplenum	Container ID	Products
L14040523-04	347039	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:28	CLS	BRG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L14040523-04	347040	826-TC TC-ZHE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:27	CLS	BRG	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		07-APR-2014 14:31	ERP		

Samplenum	Container ID	Products
L14040523-05	347041	FLASH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:27	CLS	BRG	

Samplenum	Container ID	Products
L14040523-05	347042	826-TC TC-ZHE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-APR-2014 14:31	ERP		
2	ANALYZ	W1	TCL	08-APR-2014 10:33	BRG	CLS	
3	STORE	TCL	W1	11-APR-2014 12:27	CLS	BRG	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		07-APR-2014 14:31	ERP		

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login